DOCUMENT RESUME

ED 461 063 CG 027 931

TITLE	Reducing Violence: A Research Agenda. A Human Capital Initiative Report.
INSTITUTION	American Psychological Association, Washington, DC.
SPONS AGENCY	National Inst. of Mental Health (DHHS), Rockville, MD.; National Inst. on Drug Abuse (DHHS/PHS), Rockville, MD.; Grant (W.T.) Foundation, New York, NY.
PUB DATE	1996-00-00
NOTE	22p.; Managed by the APA Public Interest Directorate in collaboration with the Science Directorate and Public Policy Office. Published by the Human Capital Initiative Coordinating Committee.
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adolescents; Aggression; Biological Influences; *Causal Models; Children; Cognitive Development; Elementary Secondary Education; *Etiology; Influences; *Prevention; *School Security; Social Influences; *Violence

ABSTRACT

Violence in America is a public health problem of the highest magnitude. In order to address this problem, the causes of violence and an overview of some effective treatment and prevention programs are presented in this booklet. It focuses on biobehavioral factors (ways in which physiological characteristics influence behavior) and centers on such questions as, "To what extent does the relationship between testosterone and aggression promote aggression?" Research regarding socialization factors underlying violence are also examined, with an emphasis on studies correlating the ways children are socialized during their early years and their propensity to act aggressively and violently. Other conditions behind violence include cognitive factors, which can explain why the more aggressive and violent individuals have different ways of processing information, and situational factors, such as family contexts, mob behavior, alcohol and drugs, and guns. Methods for treating the problem and for preventing violence are presented, including details on treatment models for victims and for assailants. Comprehensive prevention models are likewise detailed, along with suggestions for bridging theory and practice. It is argued that a broad-based research initiative, which supports both basic and applied research, is needed to end violence. (RJM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 461 063

REDUCING VIOLENCE

A Research Agenda

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A HUMAN CAPITAL INITIATIVE REPORT

BEST COPY AVAILABLE

CG027931

AMERICAN
PSYCHOLOGICAL
ASSOCIATION

December 1996

Dear Colleague:

The American Psychological Association is pleased to provide *Reducing Violence: A Research Agenda* as a guide for research, program development, and advocacy.

Following the Human Capital Initiative collaborative model, we have involved many individuals, representing a large number of scientific organizations and a broad array of specialties, in the development of this research agenda. The document builds on their expertise and the substantial scientific knowledge base that has accumulated over the past few decades concerning the causes, consequences, treatment, and prevention of violent behavior.

We have reviewed judiciously what has been learned through scientific investigations, and we have made considered judgments about the most valuable directions for continued and new exploration. Not every important question can be addressed, and we made difficult decisions in setting priorities for promising research directions.

We offer this research agenda not just to advance science, but also to move forward in reducing the violence that has shattered lives, ravaged families, terrorized neighborhoods, and eroded trust in communities throughout our nation.

Sincerely,

Henry Tomes, PhD
Executive Director
Public Interest Directorate

L. Rowell Huesmann, PhD
Chair, Organizing Committee on
Violence, Human Capital Initiative

The project to develop *Reducing Violence: A Research Agenda* was managed by the American Psychological Association Public Interest Directorate in collaboration with the APA Science Directorate and Public Policy Office.

The Organizing Committee initially conceptualized and outlined a set of issues for inclusion in a behavioral science research agenda on violence, then delineated the major issues in a draft document for discussion and expansion by a larger group. In April 1995 representatives of 33 behavioral science organizations, federal agencies, and foundations participated in the Violence in America Research Workshop to develop a more complete summary of research needs. All participants reviewed the document produced through the workshop process, as did an even wider array of organizational representatives. Their comments and suggestions guided the Organizing Committee in its final revisions of this document.

Organizing Committee for Reducing Violence: A Research Agenda

L. Rowell Huesmann, PhD, Chair
University of Michigan

Judith V. Becker, PhD
University of Arizona

Mary Ann Dutton, PhD
The George Washington University

John Coie, PhD
Duke University

Brian Gladue, PhD
University of Cincinnati

Darnell Hawkins, PhD
University of Illinois at Chicago

Elizabeth Susman, PhD
Pennsylvania State University

The Human Capital Initiative

The Human Capital Initiative (HCI) is a coalition of dozens of organizations that apprises policymakers of potential contributions from behavioral and social science research to pressing national concerns. The coalition's initial (1992) document, *The Human Capital Initiative: Report of the National Research Agenda Steering Committee,* was the collaborative product of the Behavioral Science Summit meetings convened by the American Psychological Society in Tucson in 1990 and in Houston in 1991. Seventy societies sent representatives to the summit meetings, which together with the HCI document, led to a large-scale, intersociety collaboration to do the following: 1) identify critical national issues that can be clarified through behavioral science research, 2) briefly summarize current knowledge and research priorities for specific issues, and 3) advocate for research funding to develop further knowledge in priority areas. Specific research initiatives that come out of this effort are informing the public discourse about research funding and priorities, authorizations, appropriations, and expenditures.

This document builds on the "Violence in America" section of the original Human Capital Initiative document. It draws broadly from scientific evidence acquired through social, psychological, biobehavioral, and cognitive research. That accumulated knowledge, winnowed down to the most promising lines of research and distilled to a manageable size, adds the power of scientific findings to the continuing struggle to resolve the problems of violent behavior and aggression.

Participants and Reviewers

Joyce Barham, *Rockville, Maryland*

Rosie Bingham, PhD, *The University of Memphis*

James Breiling, PhD, *National Institute of Mental Health*

Rosemary Chalk, *National Research Council*

Andrew Chen, PhD, *Slippery Rock University*

Don Cherek, PhD, *University of Texas-Mental Sciences Institute*

Karen Colvard, *The Harry Frank Guggenheim Foundation*

Veena Das, *University of Delhi*

Mario De La Rosa, PhD, *National Institute on Drug Abuse*

Leonard D. Eron, PhD, *The University of Michigan*

Marion Forgatch, *Oregon Social Learning Center*

Jennifer Friday, PhD, *Centers for Disease Control*

Ana Gardano, PhD, *Chevy Chase, Maryland*

Jane Goodman-Delahunty, JD, PhD, *San Clemente, California*

Gordon Nagayama Hall, PhD, *Kent State University*

Milton Hakel, PhD, *Bowling Green State University*

Rodney Hammond, PhD, *Wright State University*

Amy Holtzworth-Munroe, PhD, *Indiana University*

Kirk Heilbrun, PhD, *Hahnemann University*

Lawrence R. James, PhD, *University of Tennessee*

Pamela Kime, JD, *Colorado Mountain College*

Sharon Kirkland, PhD, *University of Maryland*

Doreen Koretz, PhD, *National Institute of Mental Health*

Mary Koss, PhD, *University of Arizona*

Felice Levine, PhD, *American Sociological Association*

Mark Lipsey, PhD, *Vanderbilt University*

Susan Martin, *National Institute on Alcohol Abuse & Alcoholism*

Lois Mock, *National Institute of Justice*

Pamela McMahon, PhD, *Centers for Disease Control & Prevention*

Oliver Moles, *Office of Educational Research Improvement*

Eve Moscicki, ScD, MPH, *National Institute of Mental Health*

Thomas Ollendick, PhD, *Virginia Polytechnical Institute & State University*

Edgar O'Neal, PhD, *Tulane University*

James O'Neil, PhD, *University of Connecticut*

Stephania O'Neill, *Substance Abuse & Mental Health Services Administration*

Cynthia Prather, *Substance Abuse & Mental Health Services Administration*

Adrian Raine, PhD, *University of Southern California*

Harry Reis, PhD, *University of Rochester*

Patricia Resick, PhD, *University of Missouri-St. Louis*

Ellen Scrivner, PhD, *U.S. Department of Justice*

Robert Sege, MD, PhD, *New England Medical Center*

Ronald G. Slaby, PhD, *Education Development Center*

Andrew Smith, JD, *American Association of Retired Persons*

Andrea Solarz, PhD, *National Academy of Sciences*

Susan Solomon, PhD, *National Institutes of Health*

Susan Sorensen, PhD, *University California Los Angeles*

Fernando Soriano, PhD, *University of Missouri*

Elizabeth Susman, PhD, *Pennsylvania State University*

Linda Tipton, PhD, *University of Maryland*

Patrick Tolan, PhD, *University of Illinois-Chicago*

Donald Vereen, MD, *National Institute on Drug Abuse*

Lenore Walker, EdD, *Denver, Colorado*

Cynthia Weaver, PhD, *Ithaca, New York*

Patricia White, *National Science Foundation*

Jacquelyn White, PhD, *University of North Carolina at Greensboro*

Martin R. Wong, PhD, *Hickory Corners, Michigan*

Dolf Zillmann, PhD, *University of Alabama*

BEST COPY AVAILABLE

Acknowledgments

The Human Capital Initiative Coordinating Committee gratefully acknowledges support for preparation of this research agenda from the National Institute of Mental Health, the National Institute on Drug Abuse, the W. T. Grant Foundation, and the American Psychological Association. Support for workshop participant travel was provided by a number of the participating organizations.

We genuinely appreciate the managerial and substantive leadership provided by APA staff: Jacquelyn Gentry, PhD, of the Public Interest Directorate; Christine Hartel, PhD, of the Science Directorate; and Andrea Solarz, PhD, formerly of the Public Policy Office (now with the National Academy of Sciences).

This report is published by the HCI Coordinating Committee on behalf of the sponsoring organizations. All sponsoring organizations have unlimited rights to reproduce and disseminate this document.

Human Capital Initiative Coordinating Committee

Milton D. Hakel, PhD
Bowling Green State University (Chair)

Rue Cromwell, PhD
University of Kansas

Kay Deaux, PhD
City University of New York-Graduate School

Michela Gallagher, PhD
University of North Carolina-Chapel Hill

James G. Greeno, PhD
Stanford University

John W. Hagen, PhD
University of Michigan

Charles A. Perfetti, PhD
University of Pittsburgh

Sponsors of the *Reducing Violence* Initiative

American Psychological Association

National Institute on Drug Abuse

National Institute of Mental Health

The W. T. Grant Foundation

Participating Organizations

- American Psychological Association and these specific divisions:
  - American Psychology-Law Society
  - Child, Youth, and Family Services
  - Counseling Psychology
  - Family Psychology
  - Psychopharmacology and Substance Abuse
  - Society for Industrial & Organizational Psychology
  - Society for Personality & Social Psychology
  - Society for the Psychological Study of Men & Masculinity
  - Society for the Psychological Study of Social Issues
- American Academy of Pediatrics
- American Association of Retired Persons
- American Evaluation Association
- American Sociological Association
- Asian American Psychological Association
- Association for Advancement of Behavior Therapy
- Centers for Disease Control & Prevention
- The Harry Frank Guggenheim Foundation
- Human Capital Initiative Coordinating Committee
- Hispanic Psychological Association
- National Institutes of Health
- National Institute of Justice
- National Institute on Alcohol Abuse & Alcoholism
- National Institute on Drug Abuse
- National Institute of Mental Health
- National Research Council
- National Science Foundation
- Social Science Research Council
- Society for Psychophysiological Research
- Society for Research in Child Development
- Southeastern Psychological Association
- U.S. Department of Education
- U.S. Department of Justice

BEST COPY AVAILABLE

Other Research Agendas Developed Through the Human Capital Initiative

The Changing Nature of Work: Research Initiatives Concerning Productivity in the Workplace

Vitality for Life: Psychological Research for Productive Aging

Doing the Right Thing: A Research Plan for Healthy Living

Reducing Mental Disorders: A Behavioral Science Research Plan for Psychopathology

Additional Copies

Additional copies of this or any of the documents listed above may be obtained from:

American Psychological Association
Public Interest Directorate
750 First Street, NE
Washington, DC 20002-4242

202-336-6050 (phone)
202-336-6040 (fax)
E-mail: *pubinterest@apa.org*

For more information about APA, visit the Association's website: *www.apa.org*

Table of Contents

Introduction and Overview 1

The Causes of Violence 1

Building the Knowledge Base 2

Biobehavioral Factors 2

Socialization Factors 3

Cognitive Factors 5

Situational Factors 6

Designing Effective Treatment and Prevention Programs 8

Treatment Models 8

Treating the Habitually Violent 8

Treating the Victims 9

Prevention Strategies 9

Comprehensive Prevention Models 9

Bridging Science and Practice 11

Summary 12

Introduction and Overview

Violence in America is a public health problem of the highest magnitude. Today 1 in every 10,000 people will become the victim of homicide, a rate that has doubled since World War II. America's youth are especially vulnerable. Nearly 3 in every 10,000 young males will be murdered. Among minority males between the ages of 16 and 25 who live in impoverished areas of large cities, the rate is more than 10 times higher — one in every 333. These young men are more likely to die by homicide than from any other cause.

Family violence and abuse are among the most prevalent forms of interpersonal violence against women and children. Each year about 4 million women experience a serious assault by an intimate partner, and abuse accounts for about 10% of the injuries to children under age 7 who are treated in emergency rooms.

The annual rate of rape is estimated at 7.1 per 1,000 adult women, and there is cause for alarm regarding increasing reports of violence toward elderly persons cared for at home. Further, pervasive fear has dampened the quality of life as more and more Americans feel that there are no places left which are safe and free from the threat of violence.

Policymakers, health and criminal justice officials, and community leaders want to take action to reduce violence, but their actions need to be based on a better understanding of the causes of violent behavior and how to prevent it. In recent years substantial research efforts have yielded important findings about violence:

- Aggressive, antisocial behavior in early childhood often foretells a life of violence.

- Certain physiological characteristics may predispose a child to be more or less aggressive, but these predispositions are greatly moderated by the environment in which the child grows up.

- Attitudes, beliefs, and values about violence do, as expected, noticeably influence violent behavior.

- Children who grow up in deprived environments, where poverty, frustration, and hopelessness are endemic, are at much greater risk of later involvement in violence than other children.

- Most women, elderly people, and children encounter violence in the home more than in any other location. The perpetrator of that violence is most likely to be another family member.

- Violence begets violence. Children in abusive families, who witness everyday violence in homes and neighborhoods and day by day absorb the media's representations of violence, are at great risk for becoming violent themselves.

- Even as children can be taught to be violent, they can be taught to be nonviolent.

- Children raised without consistent supervision and appropriate discipline are more likely to behave aggressively and to act violently as adults.

These research results, which represent significant advances, have provided the foundation for many existing psychological interventions that attempt to reduce violence. But intervention programs are only as good as the knowledge base on which they are built. That foundation is still missing key blocks of information about what causes violence and how to prevent it.

The Causes of Violence

Violent behavior can seldom be traced to any one cause. We need to learn more about which factors converge to push individuals toward violence. These factors roughly fall into four groups:

1) Biobehavioral factors—the biological influences on the propensity toward aggression and violence;

2) Socialization factors—the processes through which children learn patterns of thinking, behaving, and feeling from their early life experiences;

3) Cognitive factors—the ideas, beliefs, and patterns of thinking that emerge as a child grows up; and

4) Situational factors—the characteristics of the environment, such as stress or violence that stimulate violent behavior.

Each set of factors is not independent. Each influences and is influenced by the others. Dividing the factors into four sets merely provides a convenient way to organize a research agenda for the next decade. Basic research in each of these four areas, coupled with applied research on prevention and treatment methods, can move us a giant step forward towards reducing violence.

❑

Building the Knowledge Base

Biobehavioral Factors

Every newborn is unique, an amalgam of physiological characteristics inherited from its parents that have been altered by conditions during gestation and delivery. Neuroanatomy and brain chemistry differ across individuals, and influence emotions, impulsivity, and tendencies toward aggressive behavior. As the child grows and encounters new experiences, these inborn biological and psychological characteristics continue to change. Neuroscientists have learned much about how physiology affects behavior, but have also discovered that experience alters physiology—even the very structure of the brain. Recent advances in the neurosciences have offered tantalizing clues to the reciprocal influences of biological functioning and social environment on child development. How these interactions lead to violent behavior is not understood, but enough has been learned to direct scientists toward productive new lines of inquiry.

Aggressive behavior has been associated with some kinds of brain damage resulting from birth trauma, tumors, or traumatic head injuries. Specific neurophysiological deficits have been linked to violence, such as lesions in the amygdala of the brain. The association between aggression and many of these deficits in neurophysiological functioning is particularly strong in individuals who have repeatedly committed violent crimes. Less extreme aggressive behavior has also been linked to naturally occurring variations in neurophysiological and hormonal functioning. Testosterone, a male hormone, has received particular attention because it seems to be correlated with a tendency to dominate others, although recent evidence suggests that a high testosterone level is as much a consequence of dominance as a cause. Hyperactivity and attention deficits in early childhood are statistical indicators of greater risk for adolescent aggressive behavior. A slow heart rate and low physiological arousability have been linked to adolescent aggression, perhaps because they make children harder to socialize with rewards and punishments. Exciting new research has shown that aggressive young adults are likely to have lower levels of the neurotransmitter serotonin in the brain, although the role of serotonin in childhood aggression has not been sufficiently studied. Substantial research evidence demonstrates an association between violent behavior and some substances, such as lead, that are toxic to the brain and nervous system.

Although these associations are well established, they are not well understood. The mechanisms by which such physiological factors lead to violence is complicated by the clear evidence that early learning experiences and environmental factors modify the effect of predisposing physiological factors and change neurophysiological functioning. For example, perinatal complications such as birth trauma, early diet, and early childhood trauma can trigger a cascade of events that result in aggressive and violent behavior. Studies show, however, that this downward spiral into violence can be blocked by countervailing environmental factors, such as good parenting. Or it can be accentuated by parental neglect, violent abuse, and poor health care.

BEST COPY AVAILABLE

Just as some biological factors increase the risk of a child growing up to behave violently, some decrease the risk. Among the biobehavioral factors found to buffer pernicious environmental influences are good learning abilities. We know that juvenile offenders who are quick to learn and easily aroused (e.g., they respond quickly to stimuli of all kinds) are less likely to become habitual criminals in adulthood, for example.

Given this base of knowledge, the following research questions about the biobehavioral basis of violent behavior stand out as deserving more attention:

- What exactly is the role of low serotonin in aggressive and violent behavior? Studies in children and adults have produced conflicting pictures that cannot be explained by existing theories. Yet there is little dispute that serotonin levels are correlated with individual differences in aggression and impulsivity. New technologies in neurophysiology have opened opportunities in this area that should be explored. We need a better understanding of the possibly reciprocal influences of serotonin and aggressive behavior.

- To what extent does the relationship between testosterone and aggression or dominance promote aggression? We know that engaging in aggressive and dominating behaviors can increase testosterone levels; and we know that a higher testosterone level is associated with the likelihood of aggression. But we also know that there is not a simple one-to-one relationship between them. Present knowledge will only become useful in preventing aggression and violence when we learn more about the psychological processes involved and how testosterone levels interact with other factors in a person's life (both males and females).

- Exactly what is the role of "arousability" in the development of aggressive and violent behavior? Both early hyperactivity and early low levels of arousability are clearly correlated with later aggressive, violent, and antisocial behavior. Although several theories have been proposed to explain the correlation, none is completely explanatory. We need more research specifically directed at understanding the mediating psychological influences.

- Exactly what neurotoxins and traumatic brain injuries place a person at risk of becoming violent? What are the physiological and psychological processes through which these injuries or toxins stimulate aggressive and violent behavior? Without this knowledge, intervention becomes problematic.

- What is the role of biological inheritance in the neurophysiological abnormalities associated with increased risk for violent reactions and aggressive behavior? The molecular biology of violence and aggression is poorly understood, particularly as it unfolds across the development of young children. Similarly, we need better understanding of the evolutionary basis for neurophysiological characteristics that seem to be associated with aggression.

- Which kinds of environments exacerbate the effects of such biological predispositions and which kinds mitigate the effects? In addition to affecting hormones, neurotransmitters, and arousal directly, environmental factors can alter the influence of these biological factors on aggression and violence. We need to know what kind of environments offer the greatest protection for children with abnormal serotonin levels, or with indications of early hyperactivity, or with arousal deficits.

Socialization Factors

Scientists use the term *socialization* to describe the process by which a child learns the "scripts" for specific social behavior, along with the rules, attitudes, values, and norms that guide interactions with others. Growing children seem to learn as much from observing others as from their own experiences, and what children learn is influenced by their biobehavioral predispositions as well as by their environment.

Some antisocial, aggressive, and violent behaviors may be learned as simple responses to specific situations. A boy becomes frustrated because his sister won't give him a cookie; he hits her and she relents; as a result, he's learned that hitting wins cookies. Other

forms of learning are more complex, such as acquiring the complex patterns of behavior that become scripts for how to behave. Suppose a girl listens to her mother plot revenge against a neighbor who slighted her; the girl learns from this example how to retaliate against her own friends. Or what if a boy watches his father get mad because he can't find his car keys and the father releases his frustration by hitting the boy's mother; this model of behavior may become the script the boy follows when he gets angry at his friends.

Substantial evidence shows that how children are socialized during their early years accounts for much of the individual differences in the propensity to act aggressively and violently—not just in childhood but throughout life. This transaction goes both ways: The child's culture, community, neighborhood, peers, family, teachers, economic situation, exposure to mass media—these and myriad other factors influence the child, who affects them in turn.

Research has shown that parents' lack of attention to a child's behavior and inconsistent parental discipline can be major contributors to aggressive behavior. The psychological processes are complex: Extreme punishment is as likely to provoke aggression as inhibit it, for example, and harsh, abusive discipline may undermine the development of self-control as surely as a lack of monitoring and nurturance. Even more important, perhaps, is the failure of many parents to respond positively to their child's nonaggressive efforts to resolve conflict or handle frustration. By ignoring these constructive behaviors, parents inadvertently may teach their children that aggressive acts alone achieve results.

Peers exert influence from an early age, but become more important in the preteen years. As the child enters adolescence, the peer group grows even more powerful and may replace the family as the major influence in socialization. Membership in a peer group that condones antisocial or aggressive behavior is a strong predictor of individual violent behavior. Delinquents associate with each other, and although this inclination to delinquency may bring them together, their togetherness stimulates even greater delinquency.

Certain environmental conditions not only trigger violence, they can also seem to teach aggressive or violent behavior patterns. For example, poverty is associated with both sudden violent outbursts and long-term, habitual aggression. Studies suggest that poverty in itself does not seem to lead to violent behavior. Rather, it is the individual's perceived relative deprivation—the perception of being denied the income, assets, and opportunities available to most other members of society. The stress associated with poverty, combined with the violence endemic in poor neighborhoods, can push children into a corner where violence appears to be a reasonable choice. Poor neighborhoods have higher rates of drug trafficking, more bars and liquor outlets, nonexistent or unsupervised recreational areas for children and teens, dilapidated and overcrowded housing, and many other environmental deficits. Children may come to believe that aggression is normal and acceptable in such a setting. Single mothers living in poverty are often isolated, and these circumstances leave them with few psychological reserves for helping their children learn emotional control. But poor outcomes are by no means universal. Those who escape the negative consequences of such a childhood have attracted particular interest from many behavioral and social scientists trying to understand what features of physiology or psychology protected them. Beliefs and attitudes about aggression also vary by geographic region and cultural and ethnic background. In some groups, the slightest imagined wrong demands a violent response; in others, turning the other cheek is the norm.

Research has also clearly established that children's propensities for aggression are robustly correlated with their exposure to violence in the media. Those who watch more violent movies, videos, and TV are more prone to violence. Unfortunately, young children who are at greatest risk are least likely to have their TV or movie viewing monitored or restricted by their parents. Many of these children are unsupervised and free to watch adult-oriented programs night and day.

BEST COPY AVAILABLE

Although overwhelming evidence has proven that the mass media play an important role in socializing today's youth, scientists are only beginning to understand how. Long-term exposure to media violence exerts several types of influence: It conveys norms, attitudes, and beliefs justifying aggression and violence; it teaches viewers aggressive scripts for dealing with problems; and it desensitizes viewers to violence, thereby making it more palatable. In short, watching violent movies and television shows year after year and listening to brutal lyrics set to throbbing music can change one's attitudes about antisocial, aggressive behavior. In children it can lead to more aggressive behavior and also can evoke unwarranted fears and defensive actions. Whatever the violent content, movies and television exert powerful influences through visual imagery and dramatic characterizations; video games may have similar effects. These influences create and sustain conceptions about ethnic minorities, women, and other groups that can affect behavior—for good or ill.

Although there are many unanswered questions about the role of early socialization in violent behavior, certain questions stand out at the top of the research agenda:

- Violence flourishes where parental discipline is inadequate, inconsistent, or too harsh. What constitutes appropriate and effective discipline and supervision practices for children of different ages, social settings, and subcultures? When is punishment likely to suppress problem behavior, and when is it likely to promote aggression?

- What are the specific elements of poverty, deprivation, and inequality that promote socialization to violence? Is it the stress of living in poverty and comparative deprivation, the exposure to illegal activity, the lack of available resources? Is it the feeling of helplessness engendered by poverty, the isolation and exclusion from mainstream society, the crowding and other conditions associated with substandard housing?

- High-risk neighborhoods with endemic violence and poverty have different effects on children with apparently similar characteristics. Some are socialized into violence and some are not. We need to understand better what are the protective factors that inoculate children against the detrimental effects of these environments.

- More aggressive, violent children seem to prefer the company of similar children. Why? Are aggressive children more tolerant of other aggressive children? Do aggressive children make their peers more aggressive? How? In general, what is the process through which peers attain so much influence over behavior in middle and later childhood?

- What is the most important process through which long-term exposure to violence in the media promotes violent behavior?

  - Imitation of violent acts in the media?
  - Changes in beliefs and values about violence?
  - Stereotyping groups that are frequent victims of violence—e.g., women and minorities?
  - Emotional desensitization to violence?

Cognitive Factors

The most lasting effects of early experience seem to be mediated by changes in what might be called the software of the brain. Early socialization interacts with biobehavioral predispositions to mold the mental processes that help a person control behavior—awareness, perception, reasoning, and judgment. Scientists call these cognitive processes.

Research has shown that more aggressive and violent individuals have different ways of processing information and thinking about social situations. They tend to perceive hostility in others when there is no hostility. They tend to be less efficient at thinking of nonviolent ways to solve social disagreements. They tend to be more accepting of aggression and violence in general and think it is acceptable to behave that way.

From their own experience and from watching others around them or in the mass media, children learn patterns of behavior, beliefs about the world, attitudes and values about what is appropriate or required, expectancies about what others may do, and styles of causal attribution. Once such cognitions have crystallized during socialization, they become stubbornly difficult to change.

Cognitive styles not only influence planned behavior, they also affect the likelihood of impulsive aggression. During social interactions one person might strike out without thinking, whereas another, more reflective, person might weigh the consequences of such behavior. Research has shown, however, that even among impulsive individuals, those who are predisposed to perceive hostility in others are more likely to act aggressively. Research has also now shown that, contrary to popular belief, fantasizing about attacking someone makes a real future attack more likely, not less likely. Such fantasies simply serve as cognitive rehearsals for the act. In emotionally charged situations, youth often revert to well-rehearsed, familiar responses, which may turn a conflict into a violent encounter.

Although a culture's tolerance for violence shapes individual attitudes and beliefs, not all members of society are equally affected. Research suggests that children who are less skilled intellectually may be particularly at risk for developing proviolence cognitions. The relationship between aggression and poor intellectual development is a two-way street, however. Committing a violent act often seems to set a vicious circle in motion: Children who act aggressively are more likely to fail in school and flounder socially, and these failures engender frustration that increases the risk of more serious violence.

Within the area of cognitive processes, three major questions stand out as needing further research:

- What is the relative importance of parents, peers, schools, churches, the mass media, and culture in influencing the cognitions (beliefs, biases, scripts, mental processes) about violence among today's children? Why do peers seem to have gained influence, whereas parents seem to have lost it? How can we best intervene to prevent children from acquiring the wrong cognitions or to change their cognitions?

- How do cognitive biases, beliefs, and scripts interact with the experience of a particular moment to cause a person to behave violently? We need more exact understanding of the information processing that goes on in the mind of the person who suddenly acts violently and the one who habitually acts violently. What are the roles of brooding about wrongs and fantasizing about retaliation in such violence? Through what processes have such individuals come to justify what they are doing?

- Is the kind of thinking characteristic of aggressive and violent people related to their early temperament or cognitive abilities? Are there biobehavioral factors that predispose individuals to acquire these characteristic ways of thinking? Or does behaving aggressively and violently start a stream of events that leads to reduced cognitive functioning?

Situational Factors

Social conditions mold children as they grow up, but they also create climates that make violent reactions more or less likely in almost anyone. Often we seek the causes of violence in the person and ignore the contributing effects of the situation.

Almost any aversive situation—continuous loud noise, living in an overcrowded apartment, chronic deprivation, or failure at a job—can provoke aggression and violence in an otherwise tranquil person. A hot spell can kindle it, as can family problems. Alcohol and some drugs have well-documented associations with violent behavior. Stressful life events, such as a death, a move, a change in jobs, or divorce increase the risk for violence. All of these conditions that increase irritability and decrease inhibitions against aggression contribute to the level of violence in our society.

BEST COPY AVAILABLE

Equally likely to increase violence is anything around us that suggests violence. Fighting in the streets engenders more violence because it "cues" violent thoughts and responses. Guns, especially in the hands of young men, make violent confrontations more deadly when they do occur. Research has shown, however, that just the presence of guns and other weapons also makes violence more likely to occur. The sight of a weapon cues aggressive and violent responses that might not otherwise be considered. Even a picture of a gun or other weapons in a room can increase the likelihood that a youth in that room will behave aggressively.

The family is the setting for much of the violence directed at women, children, the elderly, people with disabilities, and sometimes men. The greatest threat to women and children appears to come from members of their own families or intimate friends, not from strangers. Family violence occurs in all socioeconomic strata, but it may be exacerbated by stress and poverty and it is tolerated in varying degrees by different cultures. Family violence also seems to be more common in families in which the parents had themselves experienced family violence as children.

Crowds can be conducive to mob behavior, and normally peaceable individuals can be lured into acts of violence when they are in a crowd. Studies have shown that being in a mob makes a person feel less personally responsible for his or her behavior. Organized groups or gangs similarly promote violence by diffusing responsibility and inculcating the belief that violence is acceptable or even esteemed. Some groups promote violence in defense of the group as a "prosocial" act. Youth gangs and terrorist organizations promote violence in this way. Even established social institutions, such as police, the military, prisons, mental hospitals, schools, and religious institutions, may inadvertently promote violence by their members through similar psychological processes.

Although scientists now recognize the important role of such situational factors in stimulating aggressive feelings, cuing violent acts, and removing inhibitions about violence, many of the processes are not well enough understood to intervene to reduce violence. In particular, we need more research directed at these questions:

- By what processes do alcohol and drugs provoke violence? Reducing inhibitions may account for some effects, but not all. People who mistakenly think they have consumed alcohol, for example, are more likely to behave violently. What psychological processes account for this phenomenon? To what extent do the effects of such substances depend on beliefs about their effects? To what extent do beliefs about oneself interact with substance use to affect behavior?

- What distinguishes families where violence occurs from those in which it never occurs? Family violence occurs in all socioeconomic and educational strata. What, then, causes it? Do cultural norms for male and female discipline or obedience make it easier to justify violence within some families? Do the social controls associated with more communal living inhibit family violence, or do the frustrations of lack of privacy stimulate family violence? What accounts for the correlation in family violence across generations? Is it simply a reflection of inherited aggressive tendencies, or does it reflect the transmission of specific husband-wife and parent-child dynamics across generations?

- How do poverty and inequality act as immediate stimulants to violence? Is the absolute discomfort produced by deprivation or the psychological alienation of relative deprivation more important in instigating violent acts? Why are some people better able to cope with deprivation than others? Do such persons get more support from their friends and family? How do their coping skills differ, especially in response to stress?

- In order to reduce the prevalence of guns among youth, we need to know more about what firearms mean to people. Why do so many carry guns? How do they justify it to themselves? Do guns give youth a sense of empowerment? Are they imitating the behavior of others they respect? Is it mostly motivated by fear?

- How do gangs that promote violence become established and thrive? What makes them so attractive to urban, minority youth? Do young people join primarily out of fear and need for protection? Do they join to gain a sense of identity? What factors and conditions within the gang make individual youngsters participate in collective acts of violence that they would not commit on their own?

❑

Designing Effective Treatment and Prevention Programs

Many factors contribute to violence, and these causes need to be better understood if we are to design effective treatment and prevention programs. The research agenda outlined so far would be a significant step in that direction. But we cannot wait for perfect understanding before we try to develop better prevention and treatment methods. Researchers have already made important strides in identifying which treatments are most effective, and we are poised to make further strides. What is needed now is applied research on some critical questions related to the prevention and treatment of violence.

Treatment Models

Any hope of changing habitual perpetrators of violence depends on developing treatments that are developmentally appropriate, culturally relevant, and cost effective. Equally important is the need for strategies for treating the psychological and social consequences of violence for victims and society.

Treating the Habitually Violent

Recent field experiments have demonstrated that some treatments and interventions are effective at reducing habitually aggressive behavior, but little is known about tailoring these treatments to different populations and problems. Techniques that are effective in small experiments often break down when applied in a real-world correctional setting because of practical considerations.

Simply punishing violent offenders, whether juveniles or adults, is not as reasonable as it sounds if the goal is to prevent future violence. The threat of punishment, which serves as a deterrent to some crimes, appears to be less effective with violent behavior. Violence is often the impulsive and unthoughtful response to a provocation, real or imagined. Punishment can actually provoke rather than reduce aggression and violence, particularly in youth. Harsh physical punishment for juveniles can increase violent tendencies by fostering alienation, conditioning hostility and fear, and providing models for imitating violence. Research has shown that the ways aggressive youth think about the punishment and rewards they receive and the speed and certainty with which they are delivered are more important in changing their behavior than the magnitude of the rewards and punishments. Punishment may suppress antisocial behavior briefly, but more lasting behavior modification comes only after alternative ways of coping with social problems are learned. Yet the complex interplay of an individual's thoughts with parental, peer, and societal rewards and punishments is still not well understood.

To improve our success in treating children, adolescents, and adults who have committed violent acts, we need applied research directed at four questions:

- What is the optimal way to combine parental and societal punishments and rewards with other treatments to reduce the risk of subsequent violence? How do differing cultural norms and standards alter the effectiveness of punishments, rewards, and other treatments for different groups? How does the optimal combination of treatments change from early childhood, to adolescence, to young adulthood?

- How effective are programs aimed at changing the ways that violent offenders think about violence (e.g., their attitudes, values, and beliefs) in reducing risk for subsequent violence when combined with appropriate levels of reward and punishment?

BEST COPY AVAILABLE

- Are programs aimed at changing family interaction patterns and child-rearing practices effective in reducing risk for subsequent violence when combined with appropriate levels of reward and punishment?

- How should treatment programs for aggressive youth under the jurisdiction of juvenile justice systems be organized and coordinated with school and community efforts to minimize the risk of repeated aggressive behavior? How can individual rights be protected at the same time? How should programs be organized and managed *outside* the juvenile and criminal justice systems to ameliorate the problems of violence?

Treating the Victims

Violence harms its victims both physically and psychologically. It traumatizes victims, bystanders, and family members alike. It can trigger paralyzing anxiety and fear, long-lasting depression, or deep anger. Some victims become later perpetrators of violence. Although a substantial amount of effort has been devoted to finding the best ways to treat violent offenders, little research has been conducted on the best ways to treat the victims of violence to minimize their psychological problems. Standard treatments for depression and anxiety may be inappropriate in these cases. Programs to treat victims have been shown to be most effective when they are delivered in natural locations (schools, community groups, health care environments) and when they are culturally relevant and age- and sex-specific. Therapies that are more specific to different types of victimization have yet to be developed. Thus, a major goal for applied research is to determine:

- Which types of psychological treatments are most appropriate for victims of different types of violence? What is most appropriate:

  - For women victimized by their husbands or intimate partners?

  - For children who have endured abuse from a parent?

  - For those bullied by peers or gangs in the school and neighborhood?

  - For those who are victims of sexual violence?

  - For the victims of racial or other bias-related violence?

  - For those who seem to be the victims of arbitrary violence?

Prevention Strategies

Preventing violent behavior before it occurs is obviously preferable to any form of treatment after the fact. A decade of marked growth in prison populations has not reduced violence in American society, particularly among adolescents. It is time to test the promise of well-developed, fully implemented early prevention programs. Advocates of such programs argue that they would decrease the rate of crime and violence for less money than it costs to lock up offenders and keep them confined. It bears repeating, however, that adequate prevention programs can only be constructed on a foundation of knowledge about the causes of violent behavior. Although nowhere near complete, that knowledge base is already sound enough to justify devising and testing prevention strategies for the groups of children at highest risk for adolescent violence and adult crime.

Comprehensive Prevention Models

Social scientists have learned a great deal about which groups of young people are most likely to commit violent acts, but existing knowledge about the development of violent behavior has not been fully exploited to devise prevention programs for high-risk children and adolescents. Because aggression and violence usually arise from multiple causes, prevention programs directed at only one or two causes are unlikely to succeed. A broad-based ecological approach to prevention is needed.

Childhood aggression can predict adult violence in some individuals. Researchers have learned that a small proportion of children—perhaps 5 or 10 percent—grow up to account for close to 50 percent of all arrests and the majority of all violence. This group of children is a logical target for special prevention planning and prevention research at this time. In childhood they are aggressive, disobedient, and disruptive at home and in school, disliked by peers, neglected by teachers and parents, and likely to fail in school. Later they drop out of school. Unsupervised and susceptible to the pernicious influence of other delinquent youth, they grow up to be antisocial, aggressive, and violent young adults. They are likely to become involved in abusive spousal relationships, and they often abuse their own children, thus transmitting their violent legacy to the next generation. But not every child growing up under these conditions follows this destructive path, and the example of such children has provided valuable insights into how to design prevention programs.

Researchers have shown that targeted interventions can reduce the escalating sequence of aggression and violence in some children. Early help in parenting and home visits from trained outreach workers in early childhood have interrupted this negative sequence for many children. Such help may be particularly important for children of young, poor, single mothers, for as a group, these children have extremely high rates of aggressive behavior. Parent training in behavior management, when consistently received, has been shown to reduce youthful delinquency rates. Other prevention techniques, such as attitude change, anger control, social-skills training, and community action directed at the specific processes involved in violence—i.e., socialization, cognitive, situational, or biobehavioral factors—have shown promise in small-scale tests. Most of these techniques have not been tested adequately in field trials, however, even though some have been implemented at substantial cost. This suggests a top priority:

- We need to test whether a theory-based sequencing of biobehavioral, socialization, cognitive, and situational prevention strategies across the prenatal period into early adolescence can produce significantly improved prevention rates.

- *Biobehavioral interventions.* Many neurological deficits or neurotoxins implicated in violent behavior arise from events that could be prevented or treated: Perinatal exposure to alcohol and drugs, prenatal and perinatal injuries, environmental exposure to lead, hormonal abnormalities, child abuse, accidental head injuries. Once the deficits occur, however, attempts to remove or remedy the biological cause may need to be supplemented by active physiological treatment.

- *Socialization.* We need to determine which techniques are most effective in helping parents, teachers, and others to mold appropriate behaviors and thinking in high-risk children. What is the best way to teach young parents how to discipline their children appropriately? How do we best teach children alternative ways of dealing with stress, insults, anger, and family disputes? How do we best counteract the pernicious socializing influence of violence in the mass media? At what age are preventive interventions most effective in altering the course of antisocial socialization in these children?

- *Cognitions, attitudes, and beliefs.* Violent behavior is often most immediately the consequence of attributions, attitudes, beliefs, scripts, and other cognitions that are learned by children. We need to test more carefully a variety of techniques that have been proposed for preventing the formation of these violence-promoting cognitions and for changing them once they are formed. We need to see if early school-based interventions of this type can successfully counteract the influence of poor preschool socialization.

- *Environmental changes.* No matter how much we learn about the socialization process, and no matter how well we learn to change attitudes, beliefs, and other cognitions, we are unlikely to prevent violence unless we can alter the environmental

BEST COPY AVAILABLE

factors in a child's life that promote aggression. Consequently, we need to examine how we can change neighborhoods, schools, and families so that they are less conducive to the development of violent behaviors. What kind of intervention with a child's family would best prevent the violence between family members that has the potential for increasing the child's aggressive tendencies? Almost everyone agrees that eliminating poverty would reduce violence, but other, more achievable social changes could perhaps mitigate the aggression-promoting effects of impoverished environments. What kinds of community actions are most efficacious at diminishing the attractiveness of violent gangs to youth, at reducing the alienation of impoverished youth, and in counteracting the development of a dangerous code of the streets?

We are at the point in our knowledge where the test of such a comprehensive, developmentally oriented preventive intervention is feasible. We also need to test intervention techniques directed at counteracting very specific behaviors that promote violence. Most notably, we need research on how to reduce the prevalence and use of guns by at-risk youth.

The ready availability of guns and other weapons in today's society has intensified the danger inherent in conflict. Some young males have adopted the belief common in violent groups that it is acceptable to react to every perceived or imagined sign of disrespect with aggression. The presence of weapons increases the chances that the conflict will occur in the first place and that it will have lethal consequences once it does occur.

- Research is clearly needed on the best way for communities to keep guns out of the hands of young people. What combination of community social pressure and legal regulation work best? Since no regulation will ever be completely successful, it is equally important to pursue research on how to change attitudes among youth about carrying guns. What combination of family, school, community, and mass media education can best convince people that guns escalate violence more than they protect?

Bridging Science and Practice

Few currently funded community violence prevention activities have evolved out of coordinated planning between researchers, practitioners, or community agency directors. As a result, the most up-to-date research findings are rarely translated directly into practice. When they are, it is often after lengthy delay and sometimes without the kind of rigorous evaluation that is the hallmark of good science. Conversely, individuals and agencies responsible for controlling violence day to day typically develop violence prevention strategies that have a weak basis in theory and are never tested rigorously. Their ideas, grounded in practical experience, rarely influence the thinking or the research of social and behavioral scientists. The potential loss to both sides is enormous and wasteful, particularly in the light of the present crisis.

- We need to improve the technology of prevention so that it can be implemented by frontline community service agents without expensive training and supervision. To accomplish this goal, we need to explore how more productive and lasting partnerships can be built between community service agents, community volunteers, schools, researchers, and funding agencies. What kinds of organizational structures and communication channels can best promote these interactions?

- Research is needed on how to implement violence prevention programs that are grounded rigorously in valid theory but are also responsive to the needs of diverse cultural communities and flexible in their application. Which ideas work with what level of effectiveness in which kinds of communities? How can community input be integrated into a prevention program? If achievable, true partnerships between community practitioners, community volunteers, violence researchers, and government agencies would seem to provide the most effective approach for long-term prevention efforts.

❑

Summary

Violence is a public health problem as perilous as any disease. Although scientists have made significant advances in understanding the causes of violence, these research findings need to be replicated, expanded, and exploited by applying the technology and knowledge that have emerged only recently. True integration of criminological and sociological findings with the results of research in psychology and the neurosciences promises to help us make rapid advances in our understanding of how violence develops. A broad-based research initiative that supports both basic and applied research is needed. Basic research should be aimed at obtaining a better understanding of the causes of violent behavior—the biobehavioral factors, the socialization experiences, the cognitive processes, and the situational factors that promote it. Applied prevention research should be directed at developing the tools to prevent and treat violent behavior within the framework of knowledge on causation provided by the basic research. In the long run the costs of such a program would be small compared to the human and economic losses that our nation suffers because of rampant violence in American society.

Other APA Public Interest Directorate Projects On Violence 1984-1996

Task Force on the Victims of Crime and Violence

Task Force on Television and Society

Commission on Violence and Youth

Task Force on Male Violence Against Women

Child Abuse and Neglect Working Group

Violence Against Children in the Family and the Community: A Conference on Causes, Developmental Consequences, Intervention and Prevention

Working Group on Investigation of Memories of Childhood Abuse

Presidential Task Force on Violence and the Family

Ad Hoc Committee on Legal and Ethical Issues in the Treatment of Interpersonal Violence

AMERICAN
PSYCHOLOGICAL
ASSOCIATION

American
Psychological
Association

1996